

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-10 (Canceled).

Claim 11 (Currently Amended): A method of assisting steering of steered wheels of a vehicle, comprising:

determining a response time between an action of a driver on the steering wheel and a commencement of steering of the steered wheels, the response time including a predetermined delay;

calculating an angular speed and an angular acceleration of ~~[[a]]~~ the steering wheel of the vehicle;

comparing the angular speed of the steering wheel to a threshold speed;

comparing the angular acceleration of the steering wheel to a threshold acceleration;

and

when the angular speed is greater than the threshold speed and the angular acceleration is greater than the threshold acceleration, applying a phase advance between the steering wheel and a rack element to eliminate a portion of the predetermined delay so as to decrease the response time of the vehicle ~~to an action of a driver of the vehicle on the steering wheel.~~

Claim 12 (Previously Presented): The method as claimed in claim 11, wherein a steered wheels steering preset is emitted to an actuator to control the rack element, the steering present being calculated as a function of the angular speed and the angular acceleration of the steering wheel.

Claim 13 (Canceled).

Claim 14 (Currently Amended): ~~[[The]]~~ A method as claimed in claim 12 of
assisting steering of steered wheels of a vehicle, comprising:
calculating an angular speed and an angular acceleration of a steering wheel of the
vehicle;
comparing the angular speed of the steering wheel to a threshold speed;
comparing the angular acceleration of the steering wheel to a threshold acceleration;
and
when the angular speed is greater than the threshold speed and the angular
acceleration is greater than the threshold acceleration, applying a phase advance between the
steering wheel and a rack element so as to decrease a response time of the vehicle to an action
of a driver of the vehicle on the steering wheel,
wherein a steered wheels steering preset is emitted to an actuator to control the rack
element, the steering present being calculated as a function of the angular speed and the
angular acceleration of the steering wheel, and
wherein the steering preset is calculated based on an angle of steer of the steered
wheels and a temporal advance, according to the following equation:
$$\alpha_c(t) = \alpha(t) + t_1 \alpha_1(t) + t_1^2 \alpha_2(t)/2,$$

 α_c being the steering present, α being an angle of steer of the steering wheel, t_1 being
the temporal advance, α_1 being the angular speed of the steering wheel, and α_2 being the
angular acceleration of the steering wheel.

Claim 15 (Previously Presented): The method as claimed in claim 14, wherein the
temporal advance is calculated based on the angle of steer of the steering wheel.

Claim 16 (Currently Amended): A system for assisting steering of steered wheels of a vehicle, comprising:

a sensor to measure an angular speed and an angular acceleration of a steering wheel of the vehicle; and

a control unit to determine a response time between an action of a driver on the steering wheel and a commencement of steering of the steered wheels, the response time including a predetermined delay, and to compare the angular speed of the steering wheel to a threshold speed and to compare the angular acceleration of the steering wheel to a threshold acceleration, wherein

when the angular speed is greater than the threshold speed and the angular acceleration is greater than the threshold acceleration, the control unit applies a phase advance between the steering wheel and a rack element to eliminate a portion of the predetermined delay so as to decrease the response time of the vehicle ~~to an action of a driver of the vehicle on the steering wheel.~~

Claims 17 and 18 (Canceled).

Claim 19 (Previously Presented): The system as claimed in claim 16, wherein the control unit comprises means for calculating a temporal advance as a function of the angular speed and the angular acceleration of the steering wheel, and means for calculating a steer angle preset as a function of angular parameters of steering of the steered wheels and of the temporal advance.

Claim 20 (Previously Presented): The system as claimed in claim 16, wherein the control unit comprises a fuzzy logic element for formulating a confidence index as a function of the angular speed and the angular acceleration of the steering wheel, and a table for deducing a temporal advance from the confidence index.

Claim 21 (Previously Presented): The method as claimed in claim 11, further comprising:

setting the phase advance equal to zero when the angular speed of the steering wheel is less than the threshold speed or the angular acceleration of the steering wheel is less than the threshold acceleration.

Claim 22 (Previously Presented): The method as claimed in claim 14, wherein the temporal advance is between 10 and 100 milliseconds.

Claim 23 (Previously Presented): The system as claimed in claim 16, wherein the control unit sets the phase advance equal to zero when the angular speed of the steering wheel is less than the threshold speed or the angular acceleration of the steering wheel is less than the threshold acceleration.

Claim 24 (Previously Presented): The system as claimed in claim 19, wherein the means for calculating the steer angle preset calculates the steer angle present according to the following equation:

$$\alpha_c(t) = \alpha(t) + t_1\alpha_1(t) + t_1^2\alpha_2(t)/2,$$

α_c being the steer angle present, α being an angle of steer of the steering wheel, t_1 being the temporal advance, α_1 being the angular speed of the steering wheel, and α_2 being the angular acceleration of the steering wheel.

Claim 25 (Previously Presented): The system as claimed in claim 24, wherein the temporal advance is between 10 and 100 milliseconds.